

Yian Su, Ph.D. Candidate

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Education

- Sep. 2021 – present 📖 **Ph.D., Northwestern University**, Computer Science.
Advisor: *Simone Campanoni*
Research Interest: *Parallelizing & Optimizing Compilers, Runtime Scheduling Techniques, Heterogeneous Systems.*
- Sep. 2018 – Jun. 2020 📖 **Master's, Northwestern University**, Computer Science.
Advisor: *Simone Campanoni*
Thesis: *A Better Memory Understanding for Program Dependence Graph through Static-Value Flow Analysis.*
- Sep. 2017 – Jun. 2018 📖 **University of Illinois at Chicago**, Electrical and Computer Engineering.
Senior-year Exchange Program.
Advisor: *Vladimir Goncharoff*
Project: *Intelligent Shopping Cart.*
- Sep. 2014 – Jun. 2017 📖 **Bachelor's, Northeastern University (China)**, Computer Science.

Publications

Conference Proceedings

- 1 Y. Su, M. Rainey, N. Wanninger, *et al.*, “Compiling loop-based nested parallelism for irregular workloads,” in *Proceedings of the 29th ACM International Conference on Architectural Support for Programming Languages and Operating Systems.*, ser. ASPLOS '24, 2024.
- 2 A. Matni, E. A. Deiana, Y. Su, *et al.*, “Noelle offers empowering llvm extensions,” in *Proceedings of the 20th IEEE/ACM International Symposium on Code Generation and Optimization*, ser. CGO '22, Virtual Event, Republic of Korea: IEEE Press, 2022, pp. 179–192, ISBN: 9781665405843. 📄 DOI: 10.1109/CGO53902.2022.9741276.
- 3 C. Wang, Y. Su, L. Zhou, S. Peng, Y. Yuan, and H. Huang, “A virtual network embedding algorithm based on hybrid particle swarm optimization,” in *Smart Computing and Communication*, Cham: Springer International Publishing, 2017, pp. 568–576, ISBN: 978-3-319-52015-5.



arXiv

- 1 Z. Xu, Y. Chon, Y. Su, *et al.*, *Prompt: A fast and extensible memory profiling framework*, 2023. arXiv: 2311.03263 [cs.PF].



Teaching Experience

- Sep. 2019 – Dec. 2019 📖 **Teaching Assistant**, Northwestern University.
Introduction to Database Systems and Data Warehouse.

Work Experience




- Jun. 2020 – Sep. 2021  **Software Development Engineer**, Amazon.com.
Collaborated with experienced cross-disciplinary Amazonians to conceive, design, and bring innovative products and services to market in an agile environment for delivering high-quality software
- Jun. 2019 – Sep. 2019  **Software Development Engineer Intern**, Amazon.com.
Designed, implemented an automated data pipeline to generate a new feature in Amazon's search process in order to decrease search defects rate

Skills



- Programming Languages  C, C++, Java, Python, Lisp, Perl, SQL, JavaScript, Markdown, \LaTeX .
- Softwares  LLVM, Git, Visual Studio, Jupyter Notebook.

Miscellaneous

Awards

- May 2018  **Winner**, Computer Engineering Category at UIC EXPO 2018.
- Nov. 2017  **National Scholarship**, Northeastern University.
- Nov. 2016  **National Scholarship**, Northeastern University.

Leadership

- Sep. 2018  **Vice President of Membership**. Northwestern Toastmasters Club.
- Apr. 2016  **Vice President**. International Communication Club @ Northeastern University.